KANEVSKIY, L.M., inzhener.

Specialization and cooperation of plants of the electric industry.
Vest. elektroprom. 27 no.2:33-34 F '56.   (MIRA 9:7)

1.Giproenergoprom Ministerstva elektropromyshlennosti.
          (Electric industries)

KANEVSKIY, L.M.

PEL'TSMAN, Ye.M., kandidat ekonomicheskikh nauk; KANEVSKIY, L.M., inzhener.

Studying the economics and organization of production in the electric machinery industry. Vest.elektroprom. 27 no.9:72-74 S '56.
(MLRA 10:9)
1. Nauchno-issledovatel'skiy institut Ministerstva elektrotekhnicheskoy promyshlennosti (for Pel'tsman). 2. Giproenergoprom (for Kanevskiy).
(Electric machinery industry)

KANEVSKIY, L.M., inzhener.

Increasing labor productivity in electric machinery manufacturing.
Vest.elektroprom. 27 no.12:3-6 D '56.   (MLRA 10:1)

1. Giproenergoprom.
                    (Electric machinery industry)

KANEVSKIY, L.M., inzh.

Block installation of electrical equipment and industrial combinations.
Vest. elektroprom. 32 no.9:17-20 S '61.   (MIRA 14:8)
            (Electric industries) (Electrification)

ACC NR: AP6029027   SOURCE CODE: UR/0413/66/000/014/0030/0030

INVENTOR: Kanevskiy, L. S.; Sinyavskiy, B. S.

ORG: None

TITLE: Jacketed sectional tubular heat exchanger made from graphitized carbon.
Class 17, No. 183774 [announced by the Novocherkassk Electrode Plant (Novocherkasskiy
elektrodnyy zavod)]

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 30

TOPIC TAGS: heat exchanger, corrosion resistance, carbon

ABSTRACT: This Author's Certificate introduces: 1. A jacketed sec.ional tubular
heat exchanger for aggressive media made from graphitized carbon. This unit is de-
signed for multiple passage of the heat exchanging agent in the area between the
tubes. The tube plates of each section have holes which permit the flow of the heat
exchanging agent from one section to another, thus simplifying the construction. 2.
A modification of this heat exchanger in which the holes in the tube plates are lo-
cated along the periphery of the plates in diametrically opposite directions to in-
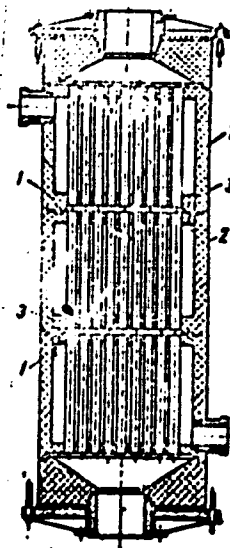crease exposure to the heat exchanging agent.

Card 1/2   UDC: 621.565.946:541.427.7

ACC NR: AP6029027

1—tube plates; 2—heat exchanger sections;
3—holes in the tube plates

SUB CODE: 13/ SUBM DATE: 11Jun65

Card 2/2

KANEVSKIY, L.S., inzh.

Mechanizing the processes of shaping and drying battery plates.
Mekh.i avtom.proizv. 14 no.12:30-32 D '60.   (MIRA 13:12)
                    (Storage batteries)

KUCHER, D.A., insh.; KANEVSKIY, L.S., insh.

Storage batteries. Vest. elektroprom. 31 no.11:75-76 N '60.

(Storage batteries)   (MIRA 13:12)

SLONIMER, B.M., inzh.; KAMENSKIY, L.Ya., inzh., retsenzent; ABAKUMOV,
G.I., inzh., red.; MOLYUKOV, G.A., red.izd-va; SOKOLOVA, T.F.,
tekhn.red.

[Assembly of equipment and plants of the food industry; a reference
manual] Montazh predpriiatii pishchevoi promyshlennosti; kratkoe
spravochnoe posobie. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
lit-ry, 1960. 376 p.

(MIRA 13:7)

(Food industry--Equipment and supplies)

KANEVSKIY, L.Ya.

Improve construction in the sugar industry and reduce its costs.
Sakh.prom. 35[i.e. 36] no.2:45-48 F '62.   (MIRA 15:4)

1. Gosudarstvennyy nauchno-ekonomicheskiy sovet Soveta Ministrov
SSSR.
                    (Sugar industry)

ACC NR: AP6033280   SOURCE CODE: UR/0141/66/009/005/0867/0875

AUTHOR: Kanevskiy, M. B.

ORG: Scientific Research Radiophysics Institute at the Gor'kiy University (Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete)

TITLE: Propagation of millimeter and centimeter radio waves in troposphere waveguide close to the surface of the sea

SOURCE: IVUZ. Radiofizika, v. 9, no. 5, 1966, 867-875

TOPIC TAGS: tropospheric radio wave, millimeter wave propagation, centimeter wave, waveguide propagation, sea water, surface property, electromagnetic wave scattering

ABSTRACT: The author calculates the average field of radio waves in the waveguide produced over the surface of the sea, making allowance for a greater degree of waviness for steeper roughness of the sea than in earlier calculations. The radiator is assumed to be a vertical elementary dipole situated below the inversion layer and radiating in a spherical layer of atmosphere over a spherical Earth surface. Scattering by the sea waves is taken into account by using a semi-empirical formula for the reflection coefficient over the averaged field, assuming the waves to have a normal statistical distribution and disregarding of the shadowing of certain waves by other waves. The altitude variation of the refractive index in the waveguide is approximated by a formula that gives a near-hyperbolic decrease at high altitudes and a linear decrease at low altitudes. Vertical sections of the field for different dis-

Card   1/2   UDC: 621.371.242.7.029.6

ACC NR: AP6033280

tances from the source in a plane passing through the center of the radiating square, perpendicular to its surface, are presented as a result of the calculations. The curves show the dependence of the average field in the waveguide on the height at different distances from the source. The author thanks S. A. Zhevakin for suggesting the topic and a discussion of the results, and S. F. Morozov, G. M. Zhislin, V. I. Aleshin, Ye. F. Zhizhenkov, and O. N. Zipalov for performing the computer calculations. Orig. art. has: 7 figures and 13 formulas.

SUB CODE: 09/ SUBM DATE: 05Feb66/ ORIG REF: 007/ OTH REF: 004
08/

Card 2/2

ADAS'KO, V.I., inzh.; KANEVSKIY, M.M., inzh.; PURE, R.R., inzh.

External memory unit for electronic computers. Elektrotekhnika
35 no.7:62-64 '64.   (MIRA 17:11)

$\mathcal{O}$

ACCESSION NR: AP4041574

S/0292/64/000/007/0004/0010

AUTHOR: Kagan, B. M. (Doctor of technical sciences); Dolkart, V. M. (Candidate of technical sciences); Novik, G. Kh. (Candidate of technical sciences); Stepanov, V. N. (Engineer); Luk'yanov, L. M. (Engineer); Kanevskiy, N. M. Polyakov, V. N. (Engineer); Tanayev, M. Ya. (Engineer); Ye. K. (Engineer); Koltypin, I. S. (Engineer); Ul'yanova, (Engineer); Voitelev, A. I. (Engineer); Molchanov, V. V.

TITLE: VNIIEM-1 multipurpose control computer

SOURCE: Elektrotekhnika, no. 7, 1964, 4-10

TOPIC TAGS: digital computer, multipurpose digital computer, control system computer, data reduction system, automatic data reduction system, data processing system

ABSTRACT: The Vsesoyuzny*y nauchno-issledovatel'skiy institut elektromekhaniki (All-Union Scientific Research Institute of Electromechanics) has developed a transistorized multipurpose digital computer and automatic data reduction system, the VNIIEM-1. The VNIIEM-1 comprises: 1) a ferrite-core memory unit which consists of 2048 locations each

Card 1/2

ACCESSION NR: AP404157४

of which carries 35 binary digits; 2) an arithmetic circuit which
includes an adder and a multiplier, as well as a trigger register;
3) a unit for controlling the ferrite-core memory unit, location and
code-operation trigger registers, control-pulse shaping circuits,
clock and command potentials, and auxiliary units for the control of
information input and output. The digital computer performs the reduc-
tion of information and provides for readout in digital form to the
external channels. The VNIIEM-1 computer can be used for the control
of various industrial processes. One such computer has been put into
trial operation at the "Asovstal'" factory. Orig art. has: 5 figures
and 1 table.

ASSOCIATION: none

SUBMITTED: 00

SUB CODE: DP

ATD PRESS: 3061

NO REF SOV: 000

ENCL: 00

OTHER: 000

Card 2/2

between the b-register

SUBMITTED: 06Mar64 ENCL: 00 SUB CODE: DP

L 39680-66   EWT(d)/EWP(v)/T/EWP(k)/EWP(h)/EWP(l)   IJP(c)   BB/GG/GD-2/BC
ACC NR: AP6009500   SOURCE CODE: UR/0105/66/000/003/0001/0008

AUTHOR: Kagan, B. M. (Doctor of technical sciences, Professor);
Dolkart, V. M. (Candidate of technical sciences); Novik, G. Kh. (Candidate of
technical sciences); Kanevskiy, M. M. (Engineer); Stepanov, V. N. (Engineer)

ORG: none

TITLE: Logical design of the VNIIEM-3 control computer

SOURCE: Elektrichestvo, no. 3, 1966, 1-8

TOPIC TAGS: digital computer, computer design, control computer / VNIIEM-3
control computer

ABSTRACT: The logical design of a new VNIIEM-3 universal control digital
computer is explained. The computer is intended for complex automation of
processes in various industries (metallurgical, chemical, electric-power,

Card 1/2   UDC: 681.142.322

L 39680-66
ACC NR: AP6009500

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telescopes, etc.). The basic set of the new computer comprises: (1) A central digital computer operating in the real time scale at a rate of 40000 operations per sec; (2) A universal converter with 500 channels capable of analog-to-digital and vice versa signal conversion; (3) A start-stop photo-input device which takes information from a punch tape at a rate of 1000 words per sec and can be interrupted at any syllable; (4) A paper-tape puncher which takes information from the computer at a rate of 20 syllables per sec; (5) An electric typewriter (or teletype) delivering the alphanumerical information; (6) An interruption unit which interrupts the program on an external signal. The form and addressing of numbers, the system of program interruption, the multicomputer operation, the error checking and correction are also explained. Orig. art. has: 5 figures and 2 formulas.

SUB CODE: 09 / SUBM DATE: 31Mar65 / ORIG REF: 002 / OTH REF: 002

Card 2/2   βℓℓℓ

KANEVSKIY, M.V. (Tallin)

Sectorial geometrical characteristics of rolled I-beams; All-Union
State Standard 8239-56. Stroi.mekh. i rasch.soor. 7 no.5:3 of cover
'65.
                                                            (MIRA 18:10)

PONOMAREV, S.D., dokter tekhn.nauk, prof.; MALININ, N.N., dokter tekhn.nauk, prof.; KANEVSKIY, M.V., insh.

Reviews and bibliography. Vest.mashinostr. 46 no.1:88-94 Ja '66.   (MIRA 19:1)

KANEVS'KIY, O. P.

STARCHENKO, V.F., golovnyy red.; KANEVS'KIY, O.P., red.; RUDNITS'KIY,P.V.,
red.; LUTSENKO, F.O., red.; BILOZUB, V.O., red.; PAVLENKO, M.K., red.;
SVISTEL'NIK, A.N., red.; KHOTENKO, M.P., red.; ZADONTSEV, A.P., red.;
POPOV, F.A., red.; DANILYUK, O.T., red.; TRITINCHENKO, A.P., red.;
AKS'ONOV, O.O., tekhn.red.

[Agricultural manual for administrative personnel of province and
district organizations, directors of machine-tractor stations,
chairmen of collective farms and agricultural specialists]
Posibnik po sel's'komu hospodarstvu dlia kerivnykh pratsivnykiv
oblasnykh i raionnykh organizatsiy, dyrektoriv MTS, holiv
kolhospiv i fakhivtsiv sil's'koho hospodarstva. Skladenyi za red.:
V.F.Starchenka [and others] Holovnyi red.V.F.Starchenko. Kyiv,
Dersh.vyd-vo sil's'kohospodars'koi lit-ry URSR. Book 1. 1946.
1269 p.   (MIRA 11:1)
1. Chlen-korrespondent akademii nauk URSR (for Starchenko).
                        (Agriculture)

22 (1)   SOV/27-59-3-23/37

AUTHORS: Zenin, I., School Director, and Kanevskiy, P., Deputy
               Director.

TITLE: In Creative Cooperation (V tvorcheskom sodruzhestve)

PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1959, Nr 3,
               p 25 (USSR)

ABSTRACT: In the Trade School No 5, Kramatorsk, technical and other
               circles are working in close cooperation. During the last
               school year, 150 posters and 68 devices for the training
               shops were made by the circles. The author lists the work
               performed in the various vocations, stating that technical
               creation, rationalization and invention have become an
               integral part of the students vocational training.
               Machinists in the 1st class study the construction and
               operation principle of the vertical drilling machine 2118-A.

ASSOCIATION: Remeslennoye uchilishche No 5, Kramatorsk (Trade School
               No 5, Kramatorsk).

Card 1/1

1. KANEVSKIY, P. V.

2. USSR (600)

4. Fisheries - Kuban' River

7. Progressive work methods of Stakhanovites in enterprises of the Azov-Kuban' Fish
   Trust. Ryb. khoz. 28, no. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

8(2), 9(6)

AUTHOR: Kanevskiy, P. Yu., Engineer   SOV/119-59-5-5/22

TITLE: An Electronic Time Relay With Impulse Charging of the Condenser
            (Elektronnoye rele vremeni s impul'snym zaryadom kondensatora)

PERIODICAL: Priborostroyeniye, 1959, Nr 5, pp 9-10 (USSR)

ABSTRACT: The present paper reports on the wiring of an electronic time relay
            with relatively small dimensions by which delay times up to $\sim$10
            minutes (with an accuracy of 0.3%) can be attained if a stabilized
            feeding source is available. This wiring is based on the principle
            that the charging of the condenser is produced by an impulse
            voltage which is then transmitted by the primary element for the
            pulses. A diagram shows the course with respect to time of the
            feeding voltage and of the voltage applied to the capacitor. The
            block scheme of this relay is shown in a diagram. A formula is
            derived for the voltage to which the relay responds. After some
            computing operations, a rather extensive expression is obtained for
            the determination of the necessary delay time. A further figure
            shows the principal circuit diagram for a delay time of 5 minutes.
            The processes going on in the relay are indicated in their
            temporal order. There are 3 figures.

Card 1/1

1. KANEVSKIY, S.

2. USSR (600)

4. Wheat

7. In the world of new cereals, Kul't. -pros. rab., 8, No. 1, 1947.

9. Monthly List of Russian Accessions, Library of Congress, ___April,___ 1953, Uncl.

KANEVSKIY, S.

Fruit culture

How many fruit trees do we have? Ogonek 30 No. 37, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952, Unclassified

KANEVSKIY, S.

On - (M. Zh. S. — Machine Supply Centers for Livestock Breeders); Payments for Services

Soviet Source: P: Ogonek No. 1 Moscow, 1 Jan. 1950 Abstracted in USAF "Treasure Island," on file in Library of Congress, Air Information Division, Report No. 80887 . Unclassified.

KANEVSKIY, S.B.

ABELEV, Yu.M., professor, laureat Stalinskoy premii; KANEVSKIY, S.B., inshener.

Experience in using water-saturated loess soils as foundations for blast furnaces. Stroi.prom. 32 no.3:6-11 Mr '54.   (MLRA 7:5)
   (Blast furnaces)

KANEVSKIY, S. B.

KANISHCHEV,V.G., inzhener; KANEVSKIY,S.B., inzhener; ROGINSKIY,M.Z., inzhener; GITMAN,F.M., kandidat tekhnicheskikh nauk.

Large-panel slabs for flooring of industrial buildings.
Stroi. prom. 33 no.4:12-14 Ap '55.   (MLRA 8:6)

1. Pridneprovskiy Promstroyproyekt (for Kanishchev, Kanevskiy).
2. Zavod Stroydetal' (for Roginskiy).
3. Dneprovskiy inzhenerno-stroitel'nyy institut (for Gitman)
                    (Floors, Concrete)

1.   KANEVSKIY, S.B. (ENGINEER), SHEVCHENKO, AL.

2.   USSR (600)

4.   Steel Works

7.   Reconstruction of a steel smelting shop.
     Stroi. prom. 30 no. 6 1952

9.   Monthly List of Russian Accessions. Library of Congress, August 1952.
     UNCLASSIFIED.

KANEVSKIY, S. G.

USSR/Communications   Jul 48

Efficiency, Industrial

"The Progress of the All-Union Inspection for
Rationalisation and Inventive Initiative at Com-
munications Enterprises," S. G. Kanevskiy, S. I.
Mel'nikova, 1 p

"Vest Svyazi - Elektrosvyaz'" No 7 (100)

Describes progress of inspection system in various
parts of USSR.

7/49T28

"Activate Work in Inventions and Suggestions for Efficiency in Rayon Communications
Offices," Vest. svyasi, No.7, pp 25-26, 1953

Translation No. 543, 27 Apr 56

DUBROVSKIY, S. G. and GAVRILOV, A. V.

"Results of the Competition for the Best Suggestions in the Field of Communications,"
Vest. Svyazi, No.8, pp 26-27, 1954

Translation Sum.No.440, 10 Aug 55

GAVRILOV, A.V.; KAMEVSKIY, S.G.

Results of the All-Union public review of efficiency work conducted in district communications offices. Vest.sviazi 14 no.4:29-30 Ap '54.

(Telecommunication)

(MLRA 7:6)

KANEVSKY, S. G.

USSR/Miscellaneous - Contests

Card 1/1   Pub. 133 - 18/23

Authors   : Gavrilov, A. V., and Kanevsky, S. G.

Title   : Results of a contest for the best suggestions in the field of communications

Periodical : Vest. svyazi 8, 26-27, Aug 1954

Abstract   : The results of the 1954 annual technical contest arranged by the Ministry of Communications for the best suggestions made in the communications field are described. The majority of suggestions were made in the field of telegraph communications and radio broadcasting; improved methods applicable to intra-regional communications also were proposed. Prize-winning suggestions and winners are listed.

Institution :   ...

Submitted   :   ...

KAMINSKIY, S.G., otvetstvennyy red.; GAVRILOV, A. V., red.; KHILIMSKAYA, L.M., tekhn. red.

[Efficiency promoters in regional communications centers] Ratsiona-lizatory raionnoi kontory sviazi. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1955. 33 p.   (MIRA 11:9)
                         (Telecommunication)

KANEVSKIY, S.G.

Efficiency work organizers. Vest.sviazi 15 no.11:30 N '55.
Vest.sviazi 15 no.11:30 N '55.
(MIRA 9:2)

1.Zamestitel' predsedatelya komissii po massovomu rabochemu isobretatel'stvu i ratsionalizatsii TSentral'nogo komiteta profsoyuza rabotnikov svyazi.
(Telecommunication)

GAVRILOV, A.V.; KANEVSKIY, S.G.

Multiply the ranks of communications innovators. Vest. sviasi
17 no.5:27 My '57.

(MLRA 10:5)

1. Nachal'nik otdela isobretenniy Ministerstva svyazi SSSR
(for Gavrilov). 2. Zamestitel' predsedatelya komissii po massovomu
rabochemu isobretatel'stvu i ratsionalizatsii TSentral'nogo
komiteta profsoyuza rabotnikov svyazi (for Kanevskiy).
            (Telecommunication)

KANEVSKIY, S.O.; KARLASHEV, N.D.; GAVRILOV, A.V.

Efficiency innovation in communications enterprises in the Urals, Siberia and the Far East. Vest.sviazi 17 no.6:26-27 Je '57.

(LMRA 10:8)

1.Zamestitel' predsedatelya komissii po massovomu izobretatel'stvu i ratsionalizatsii TSentral'nogo komiteta profsoyusa svyazi (for Kanevskiy) 2.Nachal'nik Tekhnicheskogo otdela Ministerstva svyazi RSFSR (for Karlashev) 3.Nachal'nik Otdela izobreteniy Ministerstva svyazi SSSR (for Gavrilov).

(Siberia--Telecommunication)

KANTYSKIY, S.I.

Rapidly, simply, accurately. Nauka i zhizn' 23 no.5:49 '56.

(Corn (Maize)--Testing)

(MLRA 9:8)

KANEVSKIY, S.I.

Eight hundred and thirty kilometers per hour. Nauka i zhizn'
23 no.6:16 Je '56.   (MLRA 9:9)

(Aeronautics, Commercial) (Jet planes)

KANEVSKIY, S.L.

Typical designs of buildings for the organization of radiological
departments for various purposes. Med. rad. 5 no.8:46-52 '60.

(RADIOLOGY, MEDICAL)   (HOSPITALS)   (MIRA 13:12)

KANEVSKIY, S. L.

Details in planning the locations for medical linear accelerators.
Med. rad. no.4:85-89 '62.   (MIRA 15:6)

(RADIOTHERAPY—EQUIPMENT AND SUPPLIES)

KANEVSKIY, V. (g.Kamensk-Shakhtinskiy, Rostovskaya oblast'); YEFIMAKA, I.
(g.Kamensk-Shakhtinskiy, Rostovskaya oblast').

Collars from imitation karakul. Prom.koop. no.9:13 S '56. (MLRA 9:10)

1.Predsedatel' pravleniya kollektiva arteli invalidov "Krasnyy Oktyabr'"
(for Kanevskiy).
(Fur, Artificial)

"More About Card-Receipts," Soviet journal "Radio," Issue No. 4, 1952.

KANEVSKIY, V.A., kand.med.nauk (Moskva)

Cholelithiasis. Med.sestra 18 no.4:20-24 Ap '59.

(CALCULI, BILIARY)   (MIRA 12:6)

1. KANEVSKIY, V. L.

2. SSSR (600)

4. Nose-Cancer

7. Case of cancer of the nasal septum.
   Vest. oto-rin. 14 No. 6, 1952

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

KANEVSKIY, V.L.

U.S.S.R. / General Problems of Pathology. Tumors.   T-5

Abs Jour   : Ref. Zh.-Biol., No 2, 1958, No 7803

Author   : Tretyakova R, Ya., Kanevskiy, V.L.

Inst   :

Title   : Adenomas of the Trachea.

Orig Pub   : Tr. Gos. N.-I. In-ta. UKha, Gorla i Nosa, 1956, VYP. 7,
              202-206

Abstract   : No abstract.

Card   : 1/1

KANEVSKIY, V.L., kand.med.nauk
Diseases of meatus acusticus externus. Med. sestra 21 no.2:22-28
F '62.   (MIRA 15:3)

1. Iz Otorinolaringologicheskogo otdeleniya klinicheskoy
ordena Lenina bol'nitsy imeni S.P. Botkina, Moskva.
                      (EAR—DISEASES)

KANEVSKIY, V.L., kand.med.nauk.

Plasmacytoma of the pharynx and the larynx. Zhur.ush., nos. 1
gorl.bol.23 no.3:74-75 My-Je'63.   (MIRA 16:7)

1. Iz Moskovskoy klinicheskoy ordena Lenina bol'nitsy imeni
S.P.Botkina (glavnyy vrach - dotsent Yu.G.Antonov).
          (LARYNX--TUMORS)   (PHARYNX--TUMORS)

KANEVSKIY, V.L., kand. med. nauk (Moskva)

So-called Mondor's disease. Klin. med. 41 no.6:150-152
Je '63.   (MIRA 17:1)

1. Iz Bol'nitsy imeni S.P. Botkina (glavnyy vrach - dotsent
Yu.G. Antonov), Moskva.

BUROV, Anatoliy Ivanovich; SHTERENBERG, Yevgeniy Izrailevich;
KANEVSKIY, Vladimir Leonidovich; TRAYNIN, D.L.,
retsenzent

[Automation of sintering plants in nonferrous metal-
lurgy] Avtomatizatsiia aglomeratsionnykh tsekhov tsvet-
noi metallurgii. Moskva, Metallurgiia, 1965. 167 p.
(MIRA 18:5)

Kanevskiy, V. M.

133-12-6/26

AUTHORS: Bedel'yan, L.P., Zhilyakov, I.G., Kanevskiy, V.M., Rysev, A.I., and Urinson, A.I., Engineers.

TITLE: Operation of 185-ton Open Hearth Furnaces on Natural Gas (Rabota 185-t martenovskikh pechey na prirodnom gaze)

PERIODICAL: Stal', 1957, No.12, pp. 1082 - 1085 (USSR).

ABSTRACT: Operation of a 185-ton open hearth furnace fired with natural gas carburised with fuel oil is described. Originally designed and actually used gas-oil burners are shown in Figs. 1 and 2, respectively, and the gas installation used in Fig.3. For the atomisation of the fuel oil, the use of gas and steam was tried. Operational indices of best heats and a comparison of the furnace operation when fired with gas-fuel oil, gas-fuel oil (atomised with steam) and fuel oil alone are given in Tables 1 and 2, respectively. It is concluded that on transfer of furnace from oil to natural gas (10 atm.) firing the output will not decrease only if high pressure superheated steam is used for the atomisation of fuel oil. The flame obtained with natural gas, carburised with 25% of oil has similar properties as fuel-oil flame. A proposal is made to carry out experiments on firing an open hearth furnace with natural gas preheated to 250-300 °C, as well as with gas of increased pressure (13 - 15 atm.). There are 2 tables and 3 figures.

Card1/2

133-12-6/26

Operation of 185-ton Open Hearth Furnaces on natural Gas

ASSOCIATION: Taganrog Metallurgical Works im. Andreyev
                (Taganrogskiy metallurgicheskiy zavod imeni
                Andreyeva)

AVAILABLE: Library of Congress

Card 2/2

AFONCHIKOV, N.A., insh.; KANEVSKIY, V.M., insh.

Remote control of a papermaking machine. Bum.prom. 35 no.4:19-20
Ap '60.   (MIRA 13:10)

1. Leningradskaya bumashnaya fabrika Gosnaka.
         (Leningrad--Papermaking machinery)

KANEVSKIY, V. N.

N. P. Dobychin, V. N. KANEVSKIY, co-authors of Kozhnyy ovod i bor'ba s nim
(Cutaneous Botfly and Its Control") Chkalov, Chkal. izd. 1951. 6 pages (Chkal.
obl. Administration of Agriculture. Administration of Agricultural Propaganda.
Veterinary Division). Unbound. 1,500 copies.

SO: ██████ Report U-4502; 28 August 1953. ████████

(From: NEW BOOKS ON VETERINARY MEDICINE Veterinaryiya, No. 11, pp. 63,64, Nov. 1951,
Moscow, Russian mo per.)

MOSKOV, N. M., SURNACHEV, A. V., and KANEVSKII, V. N. , Director
Chkalov Oblast Veterinary Polyclinic
    "Study of the role of sheep in the epizootiology of malignant catarrhal
    fever of cattle".
SO: Veterinariia, 29(3), 1952, p. 34.

KANEVSKIY, V.P.; KOPYCHEV, P.A.; GOL'DBERG, A.S.; LOKSHIN, M.A.; HASS, M.Ya.

Increasing the operating efficiency of pistonless jigging machines.
Koks i khim. no.7:21-27 '59.   (MIRA 12:10)

1.Dnepropetrovskiy gornyy institut (for all except Lokshin).
2.Makeyevskiy koksokhimicheskiy zavod (for Lokshin).
 (Coal preparation--Equipment and supplies)

KANEVSKIY, V.P.; LEVIN, S.T.; LIBERMAN, M.L.; LIVSHITS, G.L.; RAYVICH,
    I.D.; SHKITIN, V.I.

    Concentration of slurries in a centrifugal force field. Koks. i
    khim. no. 3:15-18 '61.   (MIRA 14:4)

    1. Dnepropetrovskiy gornyy institut (for Kanevskiy, Levin, Liberman).
    2. Nikitovskaya TSentral'naya ugleobogatitel'naya fabrika (for
    Livshits, Rayvich, Shkitin).
                            (Coal preparation)

LEVIN, S.T., kand. tekhn. nauk; KANEVSKIY, V.P., gornyy inzh.

Arc-shaped screens. Gor. zhur. no.2:61-63 F'62.

(MIRA 17:2)

1. Dnepropetrovskiy gornyy institut.

KANEVSKIY, V.P.; LIBERMAN, M.L.; ZHOVTYUK, O.V.

Increasing the productivity and efficiency of the operation of jigging machines without pistons as practiced at the Dzerzhinskii ore dressing plant. Izv. DGI 42:295-298 '64.
(MIRA 18:11)

S/139/62/000/006/018/032
E194/E155

AUTHORS: Gorelik, S.I., and Kanevskiy, V.P.

TITLE: The influence of pressure on the resistance and
capacitance of plates of selenium and copper oxide
rectifiers

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no.6,
1962, 121-124

TEXT: Semiconductor rectification occurs in the very thin
barrier layer, which is of very high impedance. Pressures not
exceeding the elastic limit, i.e. up to 200 atm, were applied to
selenium and copper oxide rectifiers and the resistance and
capacitance were determined by the bridge method in the blocking
or reverse direction. An increase in pressure from 20 to 180 atm
causes a steady decrease in resistance of about 15%, whilst the
capacitance increases by about 5% for an increase from 1 to
200 atm. The effects observed cannot be accounted for by reduction
in the energy of activation, which must be quite small with the
pressures used; they are accordingly mainly attributed to
reduction in the thickness of the barrier layer. Under steady-state
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The influence of pressure on ...   S/139/62/000/006/018/032
E194/E155

conditions the magnitude of the contact field stress acting on
the barrier layer governs the degree of its polarisation.
Compressing the barrier layer alters the contact field stress and
hence the polarisation and permittivity. Thus the change in
capacitance under compression is probably due both to the change
in thickness of the barrier layer and to change in the
permittivity.
There are 4 figures.

ASSOCIATION: Belorusskiy institut inzhenerov zheleznodorozhnogo
             transporta
             (Byelorussian Institute of Railway Transport
             Engineers)

SUBMITTED: November 15, 1961

Card 2/2

1. KANEVSKIY, YA. F.

2. USSR (600)

4. Labels

7. On the problem of introducing labels in pharmacies. Apt. delo no. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, __February__ 1953. Unclassified.

85064

/.2000 (24 of 44)

S/024/60/000/005/010/017
E194/E484

AUTHOR: Kanevskiy, Ya.M. (Moscow)

TITLE: Some Problems in the Fluxless Soldering of Aluminium and its Alloys With Low Melting Point Solders

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1960, No.5, pp.146-149

TEXT: The use of aluminium in electrical engineering is retarded by the difficulty of making reliable joints of low electrical resistance.   This article describes new and simple methods of tinning and soldering products of aluminium and its alloys, with low melting point solders.   The abrasive method of tinning is first described.   Abrasive pencils or wheels are made up from shavings of the metal to be used as a solder pressed together with powdered asbestos which serves as an abrasive.   The abrasive forms about 10% by weight of the finished wheel, no binder should be used to avoid contamination.   The shavings and asbestos are compressed cold at a pressure of 6000 to 7000 kg/cm^2.   In order to tin an article it is heated to a temperature some 25 to 50°C above the melting point of the solder in the abrasive wheel and then the oxide film on the surface is rubbed off with the wheel until the
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S/024/60/000/005/010/017
E194/E484

Some Problems in the Fluxless Soldering of Aluminium and its
Alloys With Low Melting Point Solders

characteristic metallic sheen on the tinned surface is produced.
The abrasive method of tinning can easily be mechanized and an
installation for tinning aluminium busbars is shown in Fig.2.
The abrasive method can be used to tin and solder aluminium foil of
thicknesses down to 10 to 15 microns.   No other method of tinning
aluminium, including the ultrasonic method, can deal with such fine
foils and wires as this method.   With this method aluminium and
its alloys can be tinned in the temperature range of 75 to 450°C.
The substances used for tinning may be either pure metals such as
zinc, tin or cadmium or their alloys, sometimes with additional
components to reduce the melting point or increase the corrosion
resistance such as aluminium, copper, silver, strontium, magnesium.
The mechanical strength of joints made after tinning in this way
is greater than that of joints made after tinning by other methods,
including the ultrasonic method.   In addition, the corrosion
resistance is better.   The abrasive method of tinning gives high
outputs, the rate of manual tinning is 0.65 to 1.0 cm²/sec compared
with 0.16 to 0.25 cm²/sec with ultrasonic tinning.   A disadvantage
Card 2/4

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S/024/60/000/005/010/017
E194/E484

Some Problems in the Fluxless Soldering of Aluminium and its
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of the abrasive method of tinning is that it cannot be used on the
internal surfaces of small diameter cylinders such as cable sheaths,
or in small holes or for multicore aluminium conductors. The
abrasive-crystalline method of tinning is then described. In this
case the abrasive itself consists of solder which is heated to a
temperature within the crystallization range. The aluminium oxide
film on the product to be tinned is broken down by crystals in the
solder and the molten phase coats the clean surface. Alloys with a
wide range of crystallization temperature are used. This procedure
has been used successfully for soldering aluminium single-core and
multi-core conductors into copper and aluminium terminals and for
various other processes. Equipment that is used to solder
aluminium multi-core conductors is illustrated schematically in
Fig.3 and is described. The terminal is fixed in a vertical
position and rotated by an electric motor, it is filled with solder
and heated up to a temperature within the range of crystallization.
The end of the cable is then inserted and the terminal is rotated so
that the solder in the terminal directly abraids the aluminium
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S/024/60/000/005/010/017
E194/E484

Some Problems in the Fluxless Soldering of Aluminium and its
Alloys With Low Melting Point Solders

oxide from the end of the cable.   After a suitable time rotation
ceases and the terminal is heated to a temperature at which all the
solder is molten.   Joints of this kind are found to have reliably
low electrical resistance and they are of superior mechanical
strength.   Relatively high temperature solders can be used for this
purpose so that joints can be made for reliable operation at an
ambient temperature of about 250°C.   A procedure has also been
worked out for fixing terminals to cables that are already in
position.   Soldering baths for use with the method are described.
The abrasive and abrasive-crystalline methods of tinning can be
used with aluminium magnesium alloys and aluminium magnesium
silicon alloys of various kinds and also with alloys of aluminium
with copper and magnesium or zinc copper and magnesium and others.
The equipment required is relatively cheap, much cheaper than that
required with the ultrasonic method.   There are 3 figures and
1 Soviet reference.

SUBMITTED: April 4, 1950
Card 4/4

KANEVSKIY, Ya.M., inzh.

Selection of relay protection system for operation during
nonsymmetrical short circuits. Energ. i elektrotekh. prom.
no.3:20-21 Jl-S '65.   (MIRA 18:9)

KANEVSKIY, Ye.A.; FILIPPOV, A.P.

Effect of the ionic composition of solutions of iron (III) on the dissolution of uranium dioxide. Radiokhimiia 5 no.5:602-608 '63.

(MIRA 17:3)

KANEVSKIY, Ye.A.; FILIPPOV, A.P.; VEL'MATKIN, M.I.

Optimal region of pH in the sulfuric acid dissolution of
uranium dioxide in the presence of various oxidizers and Fe
(II) ions. Radiokhimiia 5 no. 6:741-744 '63. (MIRA 17:7)

Atomnaya energiya, v. 17, no. 3, 1964, 205-208

... adiation reduction processing ...

Polarographic determination of molybdenum in ores I. A. Karvovskii and L. K. Shvartsband. *Zavodskaya Lab.* 6, 363-7 (1940).—The ores were decompd. with alkali hydroxide, leached with hot water, boiled with H_2O to remove Mn from soln. and then filtered. Five ml. of the soln. was mixed with 3 ml. of 85% H_3PO_4 and the mixt. was blown with H_2 to remove the O_2. The polarograms were not greatly affected by the large amts. of Al and other elements in the soln. The height of the waves was measured as follows: Parallel lines were drawn along the currents of soln. and the distance between the lines along the ordinate was taken as the height of the wave. This method of measuring the height of the waves gave in this case the best results. The av. error for 3-5 detns. was 5% and for 8-10 it was 2-3%. Several parallel detns. can be made in 2 hrs. The method can be used for detg. 0.18%, 50% or more Mo. It has no exceptional advantages over the colorimetric method for dild. solns. but for 30-40% Mo it is superior.   B. Z. Kamieh

ASB-SLA   METALLURGICAL LITERATURE CLASSIFICATION

DIFFERENTIAL METHOD OF POLAROGRAPHIC ANALYSIS (FOR Nb and Ti). E. A. Kanevskii (Zhur. Priklad. Khim., 1944, 17, 514-510; Brit. Abs., 1945, (C), 289).(In Russian) Circuit diagra ms for a differential mehtod of polarographic analysis are given, which with careful choice of oflpillaries broadens the field of application by eliminationg the electrolysis and charging currents, thux but not the Faraday currents. Nb andTi were success- fully determined in admixture. There are some difficulties in the technical use of this method.

METALLURGICAL LITERATURE CLASSIFICATION

KANEVSKII, E.A.

E.A.Kanevskii, On the theory of the electrode potential. I. The nature of the electrode potential and the question concerning the possibility of calculating the absolute potential. Pp. 1397-1404.

It is shown that the absolute potential of the electrode is:

$$E_d = \ell \varphi_m - \frac{m\bar{\omega}}{\omega} = \ell \varphi_m + m\varphi_0 - \frac{m a_0 \omega}{\omega}$$

$$const = -\left[\ell \varphi_m + m\varphi_0 - \frac{m a_0 \omega}{\omega}\right]_0 = \mathcal{E}_a^0 ,$$

where $\mathcal{E}_a^0$ is the absolute potential of the standard zero electrode.

State Institute of Rare and Small Metals
Moscow
December 12, 1947

SO: Journal of Physical Chemistry (USSR) 22, No. 11, 1948

KANEVSKII, E.A.

RT-94 (On the theory of an electrode potential. I. The nature of the electrode potential and the question as to the possibility of calculating an absolute potential). K teorii elektrodnogo potentsiala. I. Sushchnost' elektrodnogo potentsiala i vopros o vozmozhnosti vychisleniia absoliutnogo potentsiala.
Zhurnal Fizicheskoi Khimii, 22(11): 1397-1404, 1948.

C A

Hydration energy of ions. I. Calculation of the absolute hydration energies of ions from experimental data. K. A. Kasarskii. Zhur. Fiz. Khim. 23, 723-8(1949). Capen's calcn. (C.A. 43, 8337a) is improved. The av. abs. chem. heats of hydration are 87.5/r_1 and 107.5/r_2 kcal./mole for alkali cations and halogen anions, resp. (r_1 and r_2 are the ionic radii in crystals). E.g., K$^+$ and Cl$^-$ have 66.6 and 82.6 kcal./mole, resp.   J. J. H.

ATS.ILA METALLURGICAL LITERATURE CLASSIFICATION

KANEVSKIY, YE. A.

USSR/Chemistry - Halogen Electrodes   Jul 51

"Theory of Electrode Potential. II. Certain Prob-
lems of the Thermodynamic Theory of Electrode Po-
tential," Ye. A. Kanevskiy, Moscow

"Zhur Fiz Khim" Vol XXV, No 7, pp 854-862

Discusses and develops methods for calcn of abs
(thermodynamic) electrode potentials and derives
eqs for calcn of abs electrode potentials of non-
metallic F, Cl, Br, I, and H electrodes.

206T27

Energy of hydration of ions. II. Calculation of the sum of standard free energies of hydration of pairs of ions. K. A. Kanevskii. *Zhur. Fiz. Khim.* 25, 1102-7(1951); cf. .... From the standard electrode potentials F_a^o and F_a^o of a halogen X and a metal M and from the standard free energies ΔF_{su}, ΔF_{ru}, ΔF_{ru}, ΔF_{su}, ΔF_{su} of, resp. sublimation of M, ionization of M, ionization of X, dissertation of X_2, vaporization or sublimation of X, it is possible to calc. the sum $\Sigma = \Delta F_{su} + \Delta F_{su}$ of standard free energies of hydration of a pair of ions M $^+$ and X $^-$, by means of the relation: $\Sigma = F_1(F_a^o - F_a^o) - \Delta F_{su} - \Delta F_{su} - \Delta F_{su} - 1/2 \Delta F_{su}$, where F_1 is the Faraday. From literature data, the following values of Σ (kcal. mol.) are obtained

	Li$^+$	Na$^+$	K$^+$	Rb$^+$	Cs$^+$
F$^-$	219	197	180	171	167
Cl$^-$	191.8	170.1	152.6	146.6	139.8
Br$^-$	184.9	163.2	145.7	139.7	132.9
I$^-$	177.9	156.3	138.7	132.7	126.0

For fluorine, the value 31.8 kcal. mol.$^{-1}$ has been used for 1/2 the dissocn. energy. — Michel Boudart

KANEVSKIY, YE. A.

USSR/Chemistry - Electrolysis, Thermodynamics   May 52

"Theory of the Electrode Potential. III. Calcula-
tion of Free Energies of Electrode Processes and of
Thermodynamic Electrode Potentials," Ye. A. Kanevskiy

"Zhur Fiz Khim" Vol XXVI, No 5, pp 633-641

Calcd the free energies of a number of electrode proc-
esses. Calcd the thermodynamic (abs) electrode po-
tentials of a number of electrodes under std condi-
tions. Showed that the results of these thermodyna-
mic calcns and the conclusions made from them are in
accordance with exptl facts, with those characteris-
tics of electrode potentials which are known at pres-
ent, and with the emf of reversible galvanic ele-
ments.   219T4

KANEVSKIY, Ye. A.

USSR/ Chemistry - Physical Chemistry

Card 1/1

Author   : Ershler, B. V.

Title   : Discussion on the "absolute" scale of potentials (Discussion)

Periodical   : Zhur. Fiz. Khim., 28, Ed. 5, 957 - 960, May 1954

Abstract   : The report by E. A. Kanevskiy, published in the Journal of Physical Chem-
                istry No. 27, 1953, and dealing in the subject of absolute scale of elec-
                trode potentials is discussed and certain inconsistencies are pointed out.
                Most criticism pertains to the method of calculating the values called by
                Kanevskiy the absolute potentials. Thirteen USSR references.

Institution : ...

Submitted   : July 18, 1953

KANEVSKIY, E. A.

USSR/ Chemistry   Physical chemistry

Card   : 1/1   Pub. 147 - 9/25

Authors   : Kanevskiy, E. A.

Title   : Electrode and electrochemical potentials of an electron in metal

Periodical   : Zhur. fiz. khim. 28/7, 1228 - 1234, July 1954

Abstract   : The relation between the electrode potential and another value - elec-
                trochemical potential - which characterizes the presence of an electron
                in metal, was investigated. The importance of electrochemical
                potentials for the thermodynamics of multi-phase systems containing
                ions and electrons, is discussed. A method for accurate determination
                of the electrochemical potential (E. Lange and K. P. Mishchenko method),
                was introduced. Nine references: 6 USSR; 1 German and 1 USA (1918 -
                1953).

Institution   : ....

Submitted   : August 11, 1953

USSR/ Physics - Physical chemistry

Card 1/1   : Pub. 147 - 9/21

Authors   : Kanevskiy, E. A.

Title   : On the nature of an electrode potential

Periodical   : Zhur. fiz. khim.^{28}, 1427-1433, Aug 1954

Abstract   : The nature of the electrode potential in the case of metallic, oxida-
tion-reduction, gaseous and second order electrodes, was investigat-
ed. The two basic phases of the electrode process, occurring in any
reversible electrode, are elucidated. It was established that all re-
versible electrode potentials have one and the same thermodynamic and
physical value. The electrode potentials indicate the ability of an
electrode process in carrying out its work, They characterize the elec-
trons in a metal (electrode) and represent the electrochemical poten-
tial of an electron in the electrode relative to the electron charge.
Nine USSR references (1928-1954).

Institution : ...

Submitted   : October 5, 1953

20652
S/186/60/002/005/007/017
A051/A130

21.3100

AUTHORS: Kanevskiy, Ye. A.; Fedorova, L. A.

TITLE: The kinetics of $U^{(IV)}$ oxidation in solution with chlorates, Ammonium persulfates and hydrogen Peroxide

PERIODICAL: Radiokhimiya, v. 2, no. 5, 1960, 559 - 567

TEXT: The article deals with an investigation conducted by the authors on the oxidation kinetics of $U^{(IV)}$ in sulfuric acid solutions. Measurements of the process were made on the basis of determinations of $U^{(IV)}$ and $U^{(VI)}$ concentrations, using a CΦ-4 (SF-4) spectrophotometer. The concentrations were determined at a wave-length of 660 mmc for $U^{(IV)}$ and 410 mmc for $U^{(VI)}$. The advantage of the given method is said to be that the reaction investigated takes place directly in the cuvette of the spectrophotometer. It is pointed out that the kinetics of $U^{(IV)}$ oxidation in solutions using $KClO_3$, $(NH_4)_2S_2O_8$ and H_2O_2 were investigated for the first time by the authors. Table 1 lists the results of experiments conducted on the oxidation of uranium in a 0.5M solution of H_2SO_4, at various ratios of concentration of the $U^{(IV)}$ and oxidizing agent. The experimental data
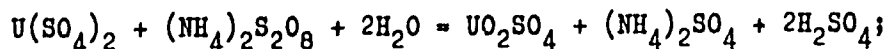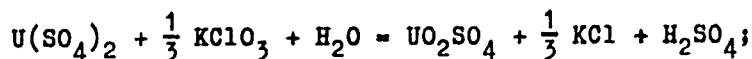
Card 1/3

The kinetics of $U^{(IV)}$ oxidation ....

showed that the oxidation processes of $U^{(IV)}$ in solution could be expressed by the following equations:

$$U(SO_4)_2 + \frac{1}{3} KClO_3 + H_2O = UO_2SO_4 + \frac{1}{3} KCl + H_2SO_4;$$

$$U(SO_4)_2 + (NH_4)_2S_2O_8 + 2H_2O = UO_2SO_4 + (NH_4)_2SO_4 + 2H_2SO_4;$$

$$U(SO_4)_2 + H_2O_2 = UO_2SO_4 + H_2SO_4.$$

Thus, one gram-mol of $U^{(IV)}$ is oxidized to $U^{(VI)}$ by $\frac{1}{3}$ g-mol of $KClO_3$, by one g-mol of $(NH_4)_2S_2O_8$, and one g-mol of H_2O_2. Figure 1 shows the relationship of $U^{(IV)}$ concentration in a 0.5M solution of H_2SO_4 to the time, at various initial concentrations of the potassium chlorate. Formulae used to determine the order of the reaction with respect to uranium are given as follows:

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The kinetics of $U^{(IV)}$ oxidation ...

$$v' = kC_1(C_2')^{n_1}C_3^n \qquad (1)$$

$$v'' = kC_1(C_2'')^{n_2}C_3^n \qquad (2)$$

where C_1 is the concentration of $U^{(IV)}$, C_2 - the concentration of $KClO_3$, C_3 - concentration of H^+, v - rate of reaction, n_2 - order of the reaction with respect to the oxidizing agent, n_3 - order of the reaction with respect to the hydrogen ions. The rate of reaction of $U^{(IV)}$ oxidation with potassium chlorate is expressed through the equation:

$$v = k\left[U^{(IV)}\right]\left[KClO_3\right]^{\frac{1}{3}}\left[H^+\right]^{\frac{1}{3}} \qquad (3)$$

where k is the constant of the reaction rate. Table 2 is a list of the values of k computed from the above equation. It was established that the

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The kinetics of $U^{(IV)}$ oxidation ....

oxidation of $U^{(IV)}$ with potassium chloride, sodium and $HClO_3$ in sulfuric acid solutions is a reaction of the first order with respect to uranium and fractional order with respect to $[ClO_3^-]$ and $[H^+]$. The rate of reaction is expressed by the equations:

$$v = k \left[U^{(IV)}\right]\left[H^+\right]^{\frac{1}{3}}\left[ClO_3^-\right]^{\frac{1}{3}} \qquad (4)$$

$$K_D = \frac{[H^+]\left[ClO_3^-\right]}{\left[HClO_3\right]} \propto 10^3 \qquad (5)$$

(i.e., dissociation constant), and

$$v = kK_D^{\frac{1}{3}}\left[U^{(IV)}\right]\left[HClO_3\right]^{\frac{1}{3}} \approx 10k\left[U^{(IV)}\right]\left[HClO_3\right]^{\frac{1}{3}} \qquad (6)$$

Card 4/13

The kinetics of $U^{(IV)}$ oxidation ....

The "acting start" of the oxidizing agent are said to be the non-dissociated molecules of $HClO_3$. The authors state that the coinciding of the kinetic curves of the change of the $U^{(IV)}$ concentration, when using $KClO_3$, $NaClO_3$ and $HClO_3$ as the oxidizing agents, leads to the conclusion that the cations Na^+ and K^+ have no effect on the oxidation kinetics. It was established that the oxidation of $U^{(IV)}$ with persulfate in sulfuric acid is a reaction of the first order with respect to uranium and the oxidizing agent. The rate of the process does not depend on the concentration of the hydrogen ions and is expressed through equation

$$v = k \left[U^{(IV)} \right] \left[S_2O_8^{2-} \right] \qquad (8)$$

The results of one of the experiments conducted for the determination of the order of the reaction with respect to the oxidizing agent are given in Table 3. Figure 6 shows the kinetic curve of the concentration change of $U^{(IV)}$ in solution at various concentrations of the hydrogen ions. Equation (8) shows that persulfates are energetic oxidizing agents in an alkaline medium, from the point of view of formal kinetics. The authors

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20652
S/186/60/002/005/007/017
A051/A130

The kinetics of $U^{(IV)}$ oxidation ....

stress the fact that the oxidation process of $U^{(IV)}$ in solution using hydrogen peroxide is a fast one, and that a mixing of the solution, prior to the start of measurements, has an effect on the kinetics of the process (Figure 7). A further conclusion is drawn that the oxidation of $U^{(IV)}$ in a sulfuric acid medium, using hydrogen peroxide is limited by diffusion. In discussing the question of the limiting stage of the process when using three investigated oxidizing agents, it is said that the rate of reaction of oxidation using hydrogen peroxide is limited by diffusion whereas, in the reaction of $U^{(IV)}$ with potassium chlorate and ammonium persulfate, the process is limited by the stage of oxidation. There are 4 tables, 7 figures and 9 references: 1 Soviet-bloc and 8 non-Soviet-bloc. The four recent English language publications read as follows: R. H. Betts, Can. J. Chem. 33, 1780, 1955; J. Halpern, J. G. Smith, Can. J. Chem., 34, 1427, 1956; T. W. Newton, J. Phys. Chem., 62, 943, 1958; J. Halpern. Can. J. Chem., 37, 148, 1959.

Card 6/13

S/078/60/005/008/024/031/XX
B023/B066

AUTHORS: Kanevskiy, Ye. A., Pavlovskaya, G. R.

TITLE: Polarographic Study of Sulfuric Acid Solutions of Hexavalent
              Uranium

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 8,
              pp. 1738-1742

TEXT: Following papers by K. Rodden (Ref. 16), A. P. Vinogradov (Ref. 17),
G. S. Tyurikov, K. I. Rosental', and V. I. Veselovskiy (Ref. 18) the
authors studied some problems of uranium reduction and disproportionation
in sulfuric acid solutions. The polarograms were taken on the polarograph
(Geologorazvedka" built in 1955. Table 1 shows the values of i_d (ma) of
the first, second, and third waves in 0.0007 mole UO_2SO_4 solution for a
concentration of 0.02-4.00 N. It may be seen that i_d of the first wave
increases with increasing concentration of sulfuric acid, whereas i_d of the
second wave decreases. The sum of i_d (I) and i_d (II) remains constant. The
third wave which corresponds to the process $U(IV) \rightarrow U(III)$, somewhat

Card 1/3

Polarographic Study of Sulfuric Acid   S/078/60/005/008/024/031/XX
Solutions of Hexavalent Uranium   B023/B066

decreases with increasing H_2SO_4 concentration. The viscosity of the solu-
tion was measured with Pinkevich's capillary viscosimeter. It may be
concluded from the experimental data that the decrease of i_d of the first
wave $U(VI) \longrightarrow U(V)$ on transition from 2N to 4N H_2SO_4 is caused by the
viscosity of the solution. The decrease of i_d of the third wave due to the
process $U(IV) \longrightarrow U(III)$ cannot be ascribed to this effect. The half-wave
potentials of the first, second, and third diffusion currents of the
0.0007 mole UO_2SO_4 solution may be seen from Table 4. $E_{1/2}$ of the first
wave remains practically constant for all H_2SO_4 concentrations considered.
$E_{1/2}$ of the third wave shows a similar behavior. $E_{1/2}$ of the second wave,
however, decreases on transition of 0.02 N to 1.0 N H_2SO_4 solution. Fig. 2
shows the linear dependence of $E_{1/2}$ of the second wave on the mean
activity coefficient of sulfuric acid. There are 2 figures, 4 tables, and
19 references: 4 Soviet and 9 US.

Card 2/2

83123

S/078/60/005/009/002/017
B015/B064

21.3200

AUTHORS: Spitsyn, Vikt. I., Nesmeyanova, G. M., Kanevskiy, Ye. A.

TITLE: Some Problems of the Thermodynamics and Kinetics of the Dissolution of Uranium Oxides in Acid Medium

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 9, pp. 1938-1942

TEXT: The isobaric potentials of the dissolution processes were determined from publication data for UO_2, UO_3, and U_3O_8 in sulfuric acid solutions of varying concentrations considering complex formation. Besides, experiments were made on the dissolution of UO_2 and U_3O_8 in sulfuric acid solutions (150-1000 g/l) at 90°C; U^{4+} and U^{6+} were determined by the method developed by P. V. Volkov and I. P. Alimarin (Refs. 6,7). The values of the isobaric potentials of the UO_2, UO_3, and U_3O_8 dissolution processes show that especially in dilute sulfuric acid solutions, oxidizing agents should be used for dissolving UO_2 and U_3O_8. A comparison of the

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KANEVSKIY, Ye.A.; PAVLOVSKAYA, G.R.

Polarographic and coulometri study of sulfuric acid and perchloric
acid solutions of uranium (VI). Zhur.neorg.khim. 5 no.9:
1964-1969 S '60.

(Uranium compounds)   (MIRA 13:11)

KANEVSKIY, Ye.A.; FEDOROVA, L.A.

Effect of complex formation by U^{4+} on the kinetics of its oxidation in a sulfuric acid solution. Zhur. neorg. khim. 5 no.10:2216-2219 O '60.

(Uranium compounds)

(MIRA 13:10)

KANEVSKIY, Ye. A.; PCHELKIN, V.A.

Effect of surface-active substances on the rate of solution of
calcite in acids. Kin. i kat. 2 no.2:188-191 Mr-Ap '61.

(Surface active agents)   (MIRA 14:6)
(Calcite)

21, 3100

S/186/61/003/003/013/018
E071/E435

AUTHORS: Kanevskiy, Ye.A. and Fedorova, L.A.

TITLE: Kinetics of Oxidation of U(IV) With Hypochlorite in Acid Solutions

PERIODICAL: Radiokhimiya, 1961, Vol.3, No.3, pp.339-347

TEXT: Oxidation of tetravalent uranium in acid solutions with chlorate was reported previously by the authors (Ref.1: Radiokhimiya, 2, 5, 559 (1960)).   In the present paper an investigation of the oxidation process with sodium hypochlorite in chloric and sulphuric acid solutions is described.   The experimental procedure was similar, the determination of concentrations of tetra and hexavalent uranium was done spectro-photometrically, the reaction being carried out in a cell of a spectrophotometer CΦ-4 (SF-4).   Sodium hypochlorite used was recrystallized from aqueous solution, dried at 38°C and analysed iodometrically.   The concentration of chlorate in a 0.176 M solution of hypochlorite was 0.01 M.   It was found that hypo-chlorite is not a direct oxidizing agent;   on introducing it into an acid solution, it decomposes into fast acting and slow acting

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Kinetics of Oxidation ...

parts.   The summary oxidizing equivalent of hypochlorite in respect of tetravalent uranium is equal to 2.   Chemical analysis, the dependence of the velocity of the reaction on the complex formation and determination of the activation energy show that the slow acting part of the oxidant is chloric acid, formed as a result of disproportion reaction of hypochlorous acid.   By investigating the ratios between the amounts of tetravalent uranium oxidized by the two active parts of the oxidizing agent in an acid medium, as well as by adsorption spectra of the solutions, it was found that the fast acting part of the oxidant is chlorine dioxide.   The degree of participation of hypochlorous acid in disproportion reaction $(3HClO_2 \longrightarrow 2HClO_3 + HCl)$ and the formation of chlorine dioxide $(HClO_2 + HClO_3 \longrightarrow 2ClO_2 + H_2O)$ were determined. Experimental results obtained at a constant and at variable acidity indicate that the degree of participation of $HClO_2$ in the disproportion reaction decreases linearly with increasing hydrogen ion concentration, while its participation in the formation of chlorine dioxide is independent of either the concentration of the oxidant or the medium in which the reaction takes place.   The

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